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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/521,459 | 09/21/2005 | Jurgen Tanner | TANN3001/FJD | 8953 |
| <div>23364 7590 10/30/2007</div> <div>BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314</div> | | | | |
| <div>EXAMINER</div> <div>DAVIS, OCTAVIA L</div> | | | | |
| <div>ART UNIT PAPER NUMBER</div> <div>2855</div> | | | | |
| <div>MAIL DATE DELIVERY MODE</div> <div>10/30/2007 PAPER</div> | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,459

TH
Applicant(s)

TANNER, JURGEN

Examiner

Octavia Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/15/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 13-21, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/18/05 (1,2 and replacement Fig. 3) is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13 – 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckert et al (5,737,963) in view of Karlsson (4,041,379).

Regarding claims 13 and 14, Eckert et al disclose an ultrasonic transducer comprising a housing element 2 with a first thread, and a second element 1 with a second thread, which is complementary to the first thread and is engaged therewith, said housing element and said second element are twistable relative to one another about the axis of the two threads, the twisting causes a change of the axial position of one with respect to the other due to the pitch of the threads, limiters 5, 7, 8 that limit the rotation of the housing 1, the ring 3 and the housing element 2 by separating the elements in the radial direction and holding the elements in a spaced apart manner, the delimiters being axial members (See Col. 3, lines 43 – 46 and 57 – 60, Col. 4, lines 54 – 57 and Col. 5, lines 21 – 25) but does not disclose that the delimiters limit the twisting of the elements. However, Karlsson discloses an apparatus for testing metal blanks utilizing at least one inspecting head moved along the surface thereof comprising a plurality of members 2, 5 that pivot about an axis and that mutually twist about an axis extending parallel to a traveling direction 7 (See Col. 4, lines 51 – 57) and a

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plurality of stop members 36, 38 that limit the mutual twisting of the members 2, 5 in a clockwise direction (See Col. 7, lines 16 – 22, See Figs. 4 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eckert et al according to the teachings of Karlsson for the purpose of, advantageously providing a device that enables an inspecting means to remain constantly in engagement with a slab surface irrespective of surface irregularities and to be moved exactly in the sensing direction without lateral displacements (See Karlsoon, Col. 1, lines 29 – 35).

Regarding claim 15, in Eckert et al, said housing element 2 includes at least two cylindrical sections of differing radii (See Fig. 1), whose axis of rotation is aligned with the axis of the threads, and between the at least two sections of differing radii, a radial step(s) 31, 32, 33 is formed, which serves as an axial stop surface for an axial barrier of said limiters (See Col. 4, lines 28 – 36).

Regarding claims 16 - 18, in Eckert et al, said housing element 1 includes a cylindrical section, whose lateral surface includes an inwardly extending annularly running groove(s) 312, 323 and is bounded in the axial direction by first and second radial steps 31, 32, 33, and said first and second radial steps each serve for one of said two axial barriers 7, 8 (See Col. 4, lines 53 – 57 and 60 – 65).

Regarding claims 19 – 21, in Eckert et al, said limiters further comprise a coupling element 13, which is engaged both with said radially outwardly extending groove 323 and with said radially inwardly extending groove 312, said coupling element comprises an annular surface and a flexible member 16 (See Col. 3, lines 64 – 67).

Regarding claims 23 and 24, in Eckert et al, the second element 1 is a sensor housing element (See Col. 3, lines 42 – 48).

Allowable Subject Matter

3. Claim 25 is allowed.

The following is an examiner's statement of reasons for allowance: The primary reasons for allowance is that there cannot be ascertained prior art that anticipates or makes obvious the provisions of "the sum of the first breadth and the second breadth, minus twice the axial thickness, corresponds to the axial shift", in combination with the other limitations presented in claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dubach (5,501,377) discloses a central sealing pin cap.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Octavia Davis whose telephone number is 571-272-2176. The examiner can normally be reached on Mon through Fri from 9 to 5. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications


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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Octavia Davis

OD/2855

10/22/07


MICHAEL CYGAN, PH.D.
PRIMARY EXAMINER